

AMENDMENTS TO THE CLAIMS:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

LISTING OF CLAIMS:

Claims 1 to 18. (Canceled).

19. (Currently Amended) A [[The]] method ~~[[as recited in claim 18,]]~~ for verifying charge invoicing for a communications connection according to time intervals, a testing device able to simulate at least one calling analog terminal device and at least one called terminal device being connected to at least one network node that can generate time pulses, the method comprising:

at least one predetermined test-communications connection is set up and cleared again via at least the one network node;

ascertaining the respective time interval between a start of the test-communications connection and a generation of a first time pulse;

determining if the ascertained respective time interval is within a first predetermined time domain;

during the test-communications connection, measuring time-unit intervals of consecutive time pulses and comparing the measured time-unit intervals of consecutive time pulses to a predetermined time interval; and

determining if at least one additional time pulse has been received after an end of the test-communications connection,

wherein if the at least one additional time pulse has been received after an end of the test-communications connection then the interval between the end of the test-communications connection and the at least one time pulse is ascertained, and a determination of whether the ascertained interval is within a second predetermined time domain is made, and

wherein the time interval between the start of the test-communications connection and the generation of the first time pulse is ascertained by:

detecting an occurrence of a first predetermined event, which corresponds to a measurable start of the test-communications connection, at a first predetermined measuring point of the testing device;

detecting a reception of a first time pulse of the test-communications connection generated by a network node at a second predetermined measuring point of

the testing device; and

as a function of the detected occurrence of the first predetermined event and the reception of the first time pulse, effecting one of starting and stopping a time measurement is started or stopped,

wherein ~~[[the]]~~ a systematic measuring ~~error~~ ~~[[errors]]~~ between ~~a~~ ~~[[the]]~~ location of an ~~[[the]]~~ actual occurrence of the start of the test-communications connection and ~~[[the]]~~ a first measuring point of the testing device is ascertained, ~~;~~ a ~~[[the]]~~ systematic measuring error between ~~a~~ ~~[[the]]~~ location of an ~~[[the]]~~ actual generation of the first time pulse and a ~~[[the]]~~ second measuring point of the testing device is ascertained, ~~;~~ an ~~[[the]]~~ interval between ~~a~~ ~~[[the]]~~ detected occurrence of the first predetermined event and the reception of the first time pulse is measured and corrected by an ~~[[the]]~~ amount of the systematic measuring error; and a determination is made whether ~~[[it is checked if]]~~ a ~~[[the]]~~ corrected interval is within the first predetermined time domain.

20. (Canceled).

21. (Canceled).

22. (Currently Amended) ~~[[The]]~~ A method ~~[[as recited in claim 21,]]~~ for verifying charge invoicing for a communications connection according to time intervals, a testing device able to simulate at least one calling analog terminal device and at least one called terminal device being connected to at least one network node that can generate time pulses, the method comprising:

at least one predetermined test-communications connection is set up and cleared again via at least the one network node;

ascertaining the respective time interval between a start of the test-communications connection and a generation of a first time pulse;

determining if the ascertained respective time interval is within a first predetermined time domain;

during the test-communications connection, measuring time-unit intervals of consecutive time pulses and comparing the measured time-unit intervals of consecutive time pulses to a predetermined time interval; and

determining if at least one additional time pulse has been received after an end of the test-communications connection,

wherein if the at least one additional time pulse has been received after an end of the test-communications connection then the interval between the end of the test-communications connection and the at least one time pulse is ascertained, and a determination of whether the ascertained interval is within a second predetermined time domain is made,

wherein time intervals of consecutive time pulses are measured, by:

starting a first time measurement by the first time pulse received by a calling analog terminal device, stopping time measurement by each subsequent time pulse received by the calling analog terminal device, wherein the time measurement was started by a respective immediately preceding time pulse which then starts a further time measurement, starting an ith time measurement by a last time pulse of the test-communications connection,

wherein each initiated time measurement is assigned a serial number,

wherein the time interval between the end of the test-communications connection and a first time pulse received after the end of the test-communications connection is ascertained, by ~~[[using the following steps]]~~:

initiating a time measurement ~~[[is initiated,]]~~ when a second predetermined event ~~[[((disconnect; loop interruption)]]~~, which corresponds to ~~[[the]]~~ a measurable end of the test-communications connection, occurs at a ~~[[the]]~~ first or second predetermined measuring point of the testing device~~;~~, stopping ~~[[the]]~~ a time measurement initiated by the second predetermined event ~~[[is stopped,]]~~ when the first time pulse is received at a ~~[[the]]~~ second predetermined measuring point of the testing device after ~~[[the]]~~ an end of the test-communications connection; and

~~[[the]]~~ comparing a value of the time measurement ~~[[is compared]]~~ to ~~[[the]]~~ a second predetermined time domain.

23. (Currently Amended) The method as recited in claim 22, wherein, when the second predetermined event ~~[[((disconnect; loop interruption)]]~~ occurs at the first or second predetermined measuring point of the testing device, the number of the currently active time measurement of the time interval of two consecutive time pulses is acquired;

the time interval between the end of the test-communications connection and further time pulses received after the end of the test-communications connection is ascertained, using the following steps:

~~[[the]]~~ a value of the time measurement for ~~[[the]]~~ a time interval between an ~~[[the]]~~ end of the test-communications connection and the first time pulse received after the end of the test-communications connection, and ~~[[the]]~~ values of all respective time measurements

for time intervals of consecutive time pulses, whose numbers are each greater than the number of the time measurement acquired in response to the occurrence of the second predetermined event ~~[[disconnect; loop interruption]]~~ at the first or second predetermined measuring point of the testing device, are added and compared to ~~[[the]]~~ a second predetermined time domain.

24. (Currently Amended) The method as recited in claim 22, wherein ~~[[the]]~~ systematic measuring errors between the location of the actual occurrence of the end of the test-communications connection and at least one of the first and~~[[or]]~~ second measuring point of the testing device is ascertained;

~~[[the]]~~ a systematic measuring error between ~~[[the]]~~ a location of ~~[[the]]~~ an actual generation of time pulses and ~~[[the]]~~ a second measuring point of the testing device is ascertained;

~~[[the]]~~ a time interval between ~~[[the]]~~ an occurrence of the second predetermined event ~~[[disconnect; loop interruption]]~~ and the reception of the first time pulse occurring after the end of the test-communications connection is measured and corrected by the amount of the systematic measuring error.

25. (Currently Amended) The method as recited in claim 19~~[[18]]~~, wherein the first measuring point is defined by the called terminal device; and

the second measuring point is defined by the calling analog terminal device, wherein the test-communications connection also being able to be ended at the two terminal devices.

26. (Canceled).

27. (Canceled).

28. (Currently Amended) ~~[[The]]~~ A testing device ~~[[as recited in claim 26]]~~ for connection to and testing of at least one network node, the at least one network node being capable of emitting time pulses, comprising:

a call simulator for simulating at least one calling analog terminal device and for simulating at least one further terminal device operatable as a called terminal device;

a first detector device for detecting time pulses;

a second detector device for detecting a first predetermined event which corresponds to a measurable start of a test-communications connection, wherein at least one of the first

and second detector device is designed to detect a second predetermined event which corresponds to a measurable end of a test-communications connection;

a first time-measuring device for measuring, in each instance, time intervals of two consecutive time pulses;

a second time-measuring device for measuring an interval between an occurrence of the first predetermined event and a reception of a first time pulse of a set up test-communications connection;

a third time-measuring device for measuring an interval between an occurrence of the second predetermined event and a reception of at least one time pulse after the measured end of the test-communications connection; and

an evaluation device for comparing measured time spans of the respective time-measuring devices to corresponding predetermined time domains;

a storage device, in which ~~a~~ a ~~[[the]]~~ systematic measuring error between ~~[[the]]~~ a location of ~~[[the]]~~ an actual start of a test-communications connection and the second detector device is stored, and in which ~~[[the]]~~ a systematic measuring error between ~~[[the]]~~ a location of ~~[[the]]~~ an actual end of a test-communications connection and one of the first ~~[[or]]~~ and the second detector device is stored, and in which ~~[[the]]~~ a systematic measuring error between ~~[[the]]~~ a location of ~~[[the]]~~ an actual generation of time pulses and the first detector device of the testing device is stored;

a correction device connected to the storage device for correcting ~~[[the]]~~ values measured by the first, second, and third time-measuring devices by ~~[[the]]~~ an amount of ~~[[the]]~~ specific systematic measuring error; and

~~[[the]]~~ an evaluation device ~~[[being]]~~ designed to compare the measured and corrected time spans to corresponding, predetermined time domains.

29. (Currently Amended) The testing device as recited in claim 28 ~~[[one of 16]]~~ further comprising:

~~[[wherein]]~~ a device for serially numbering consecutive time intervals ~~[[is provided]]~~;
in response to ~~[[the]]~~ numbers assigned to the time intervals, the third time-measuring device ~~[[may detect]]~~ detects if a time interval has been measured in the first time-measuring device after a ~~[[the]]~~ detection of the second predetermined event ~~[[disconnect, loop interruption]]~~; and

one of the third time-measuring device ~~[[or]]~~ and the evaluation device ~~[[may]]~~ add the value for the interval between the end of the test-communications

connection and the first time pulse received after the end of the test-communications connection and the values of all of the measured time intervals, whose numbers are, in each instance, greater than ~~[[the]]~~ a number of ~~[[the]]~~ a time interval that has been instantaneously measured in response to ~~[[the]]~~ an occurrence of ~~[[the]]~~ a second predetermined event ~~[[~~(disconnect; loop interruption)~~]]~~ at one of the first ~~[[or]]~~ and second detector device of the testing device.

30. (Currently Amended) The testing device as recited in claim 28 ~~[[10]]~~, wherein the first detector device is assigned to the calling ~~[[;]]~~ analog terminal device, and the second detector device is assigned to the called terminal device.

31. (New) The method as recited in claim 19, wherein the first predetermined event is at least one of a connect and a loop connection, and the second predetermined event is at least one of a disconnect and a loop interruption.

32. (New) The method as recited in claim 22, wherein the first predetermined event is at least one of a connect and a loop connection, and the second predetermined event is at least one of a disconnect and a loop interruption.

33. (New) The testing device as recited in claim 28, wherein the first predetermined event is at least one of a connect and a loop connection, and the second predetermined event is at least one of a disconnect and a loop interruption.